

FIG.1

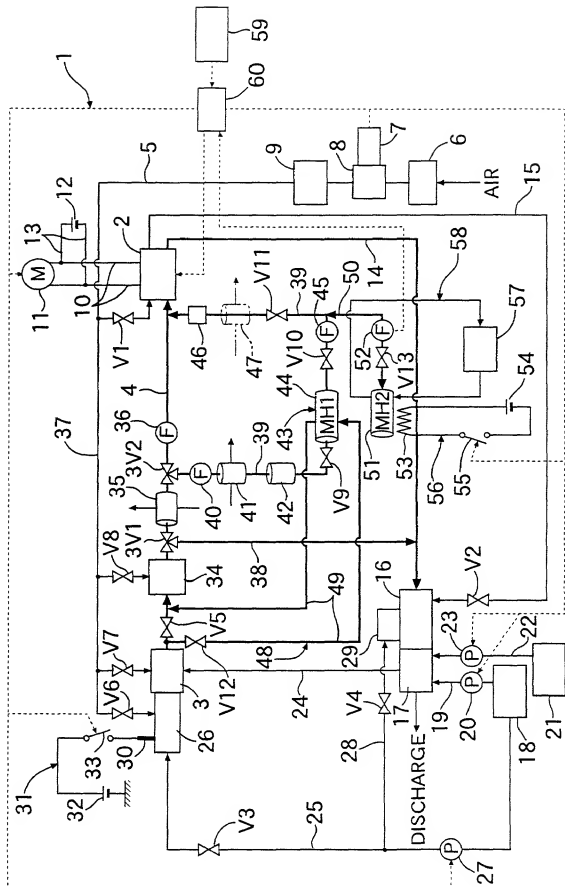


FIG.2

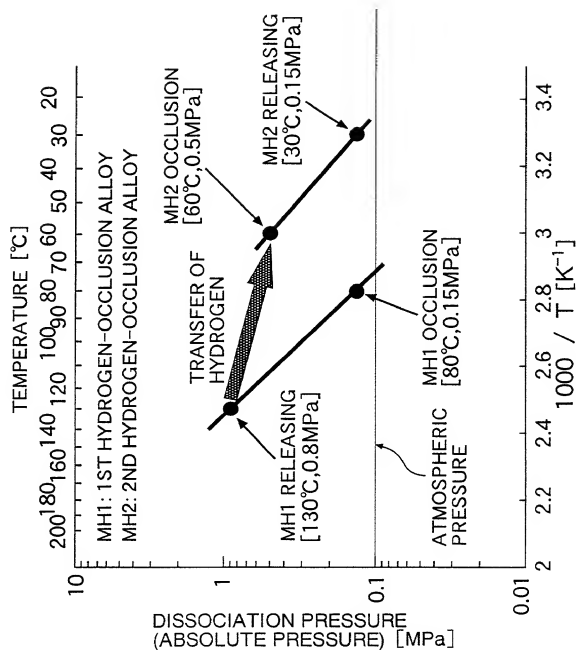


FIG.3

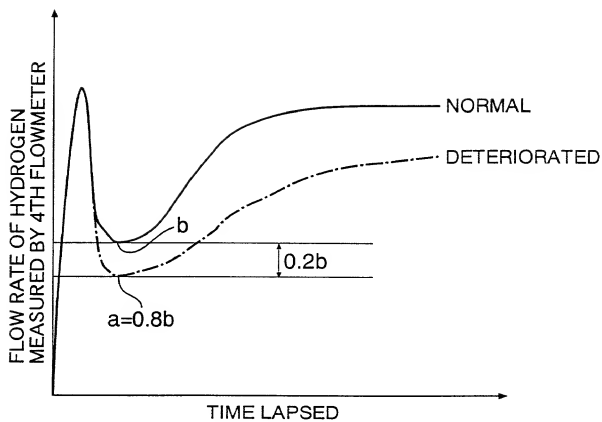
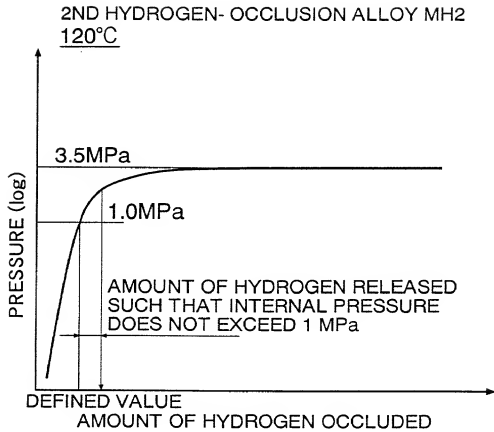
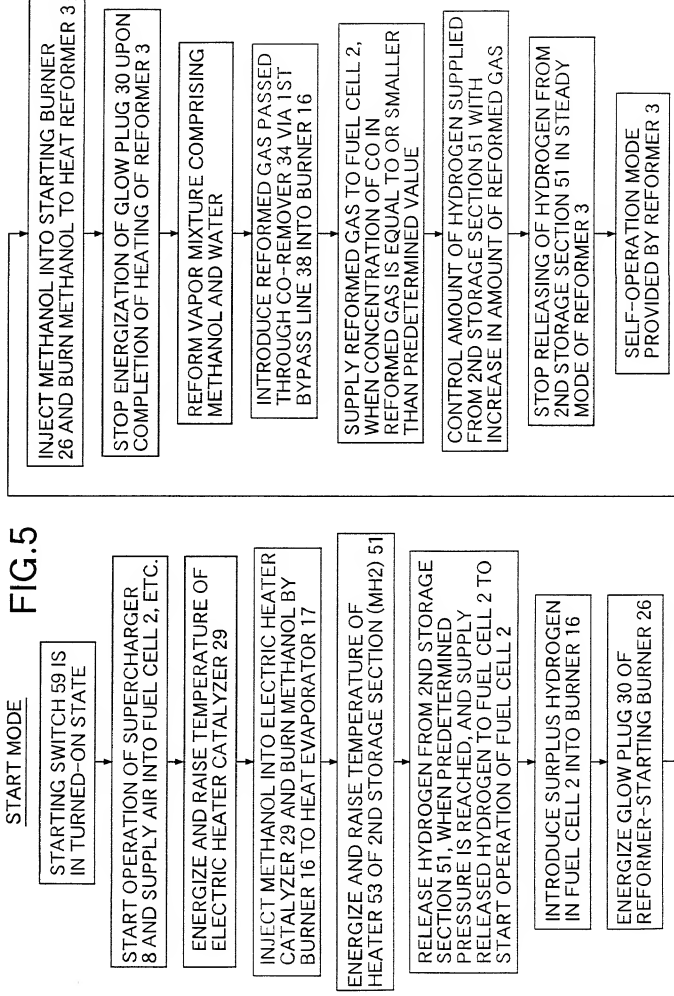


FIG.4



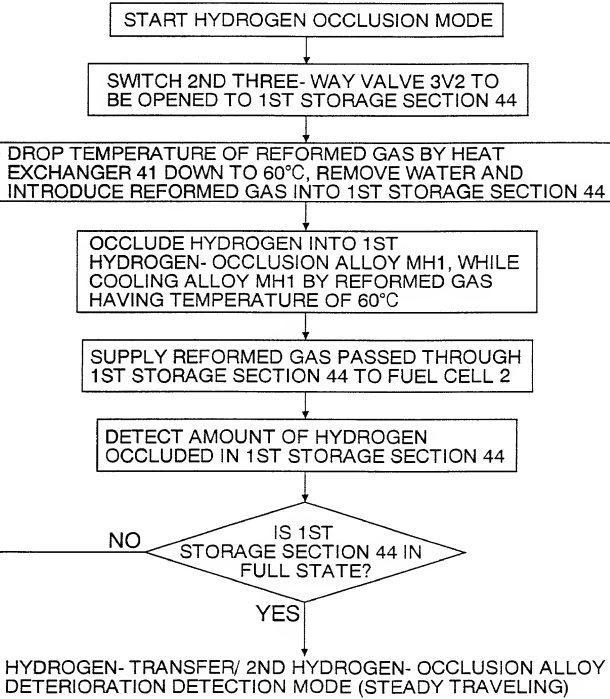
# START MODE

FIG.5



**Table 1** Summary of the data sets used in the study

### HYDROGEN OCCLUSION MODE (STEADY TRAVELING)



HYDROGEN-TRANSFER/2ND  
HYDROGEN-OCCLUSION ALLOY  
DETERIORATION DETECTION  
MODE (STEADY TRAVELING)

FIG.7

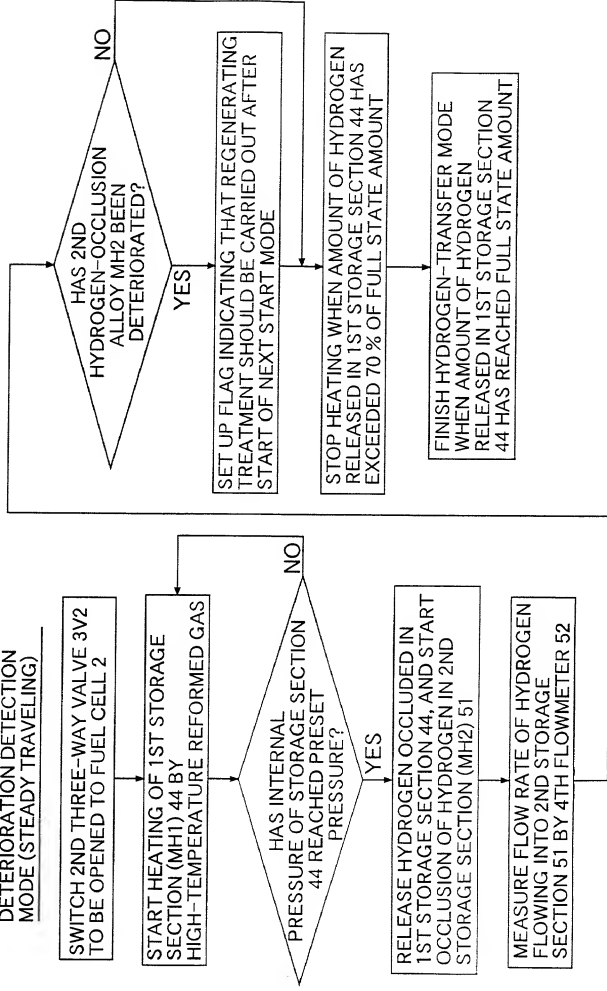


FIG.8

2ND HYDROGEN-OCCLUSION  
ALLOY REGENERATION MODE

START SELF-OPERATION MODE  
PROVIDED BY REFORMER 3

NO  
HAS 2ND  
HYDROGEN-OCCLUSION ALLOY MH2  
DETERIORATION-INDICATING FLAG  
BEEN SET UP?

YES

RELEASE HYDROGEN FROM  
2ND STORAGE SECTION  
(MH2) 51 TO FUEL CELL 2

IS REMAINING  
AMOUNT OF HYDROGEN OCCLUDED  
IN 2ND HYDROGEN-OCCLUSION ALLOY MH2 EQUAL TO  
OR SMALLER THAN DEFINED  
VALUE?

YES

NO

HEAT 2ND HYDROGEN-OCCLUSION  
ALLOY MH2 AND MAINTAIN ALLOY  
MH2 AT TEMPERATURE OF 120°C  
FOR 10 MINUTES

STOP HEATING OF 2ND  
HYDROGEN-OCCLUSION  
ALLOY MH2

FINISH REGENERATION  
MODE

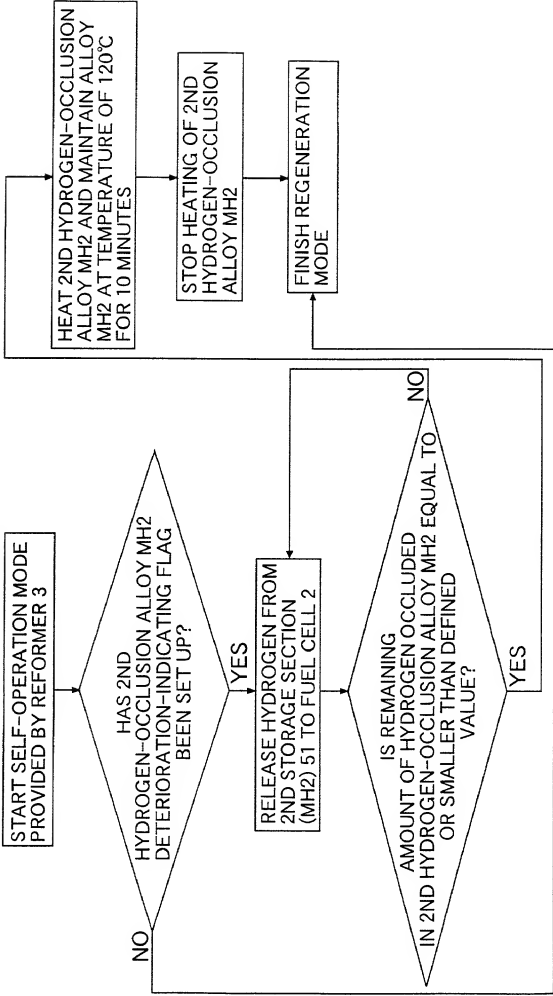




FIG. 9

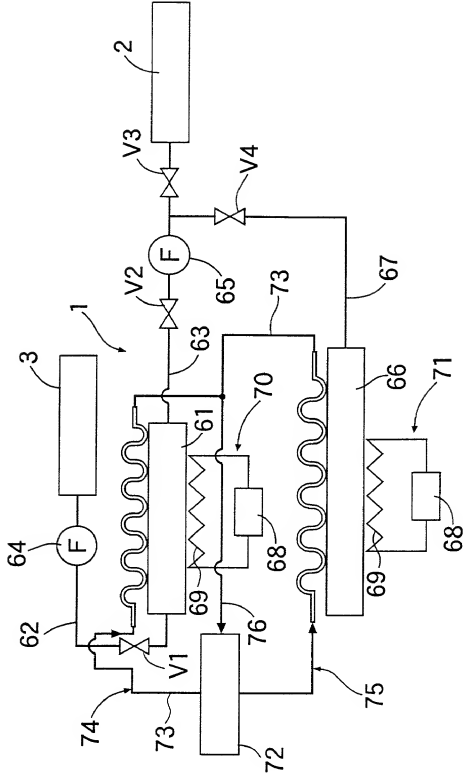


FIG.10

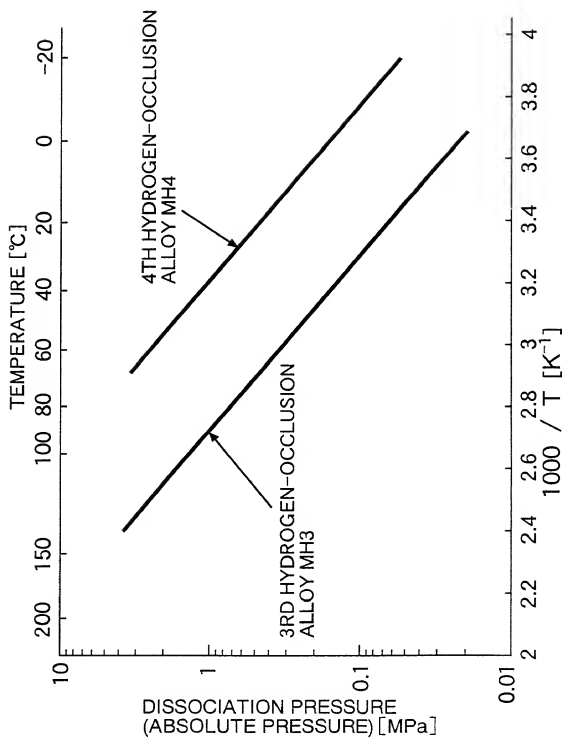


FIG. 11

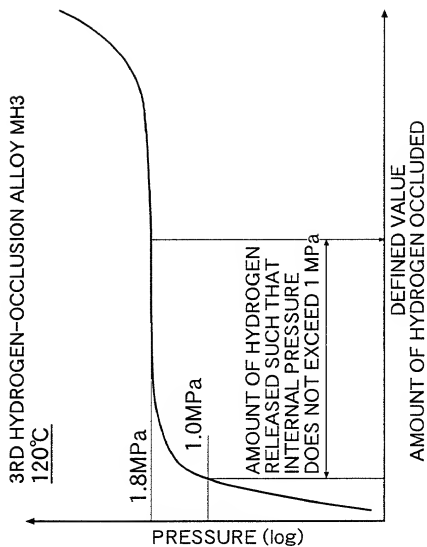


FIG.12

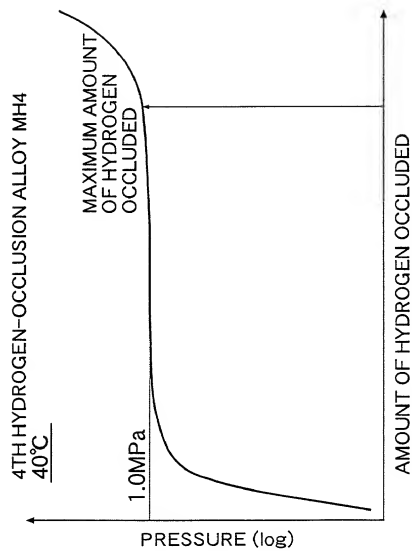


FIG.13

START/ TRAVELING MODE

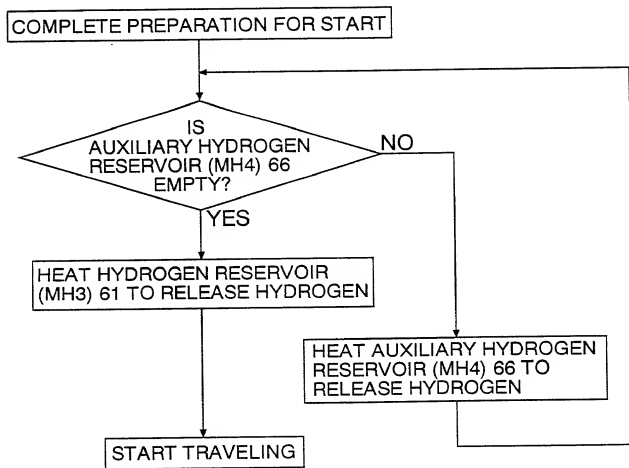


FIG. 14

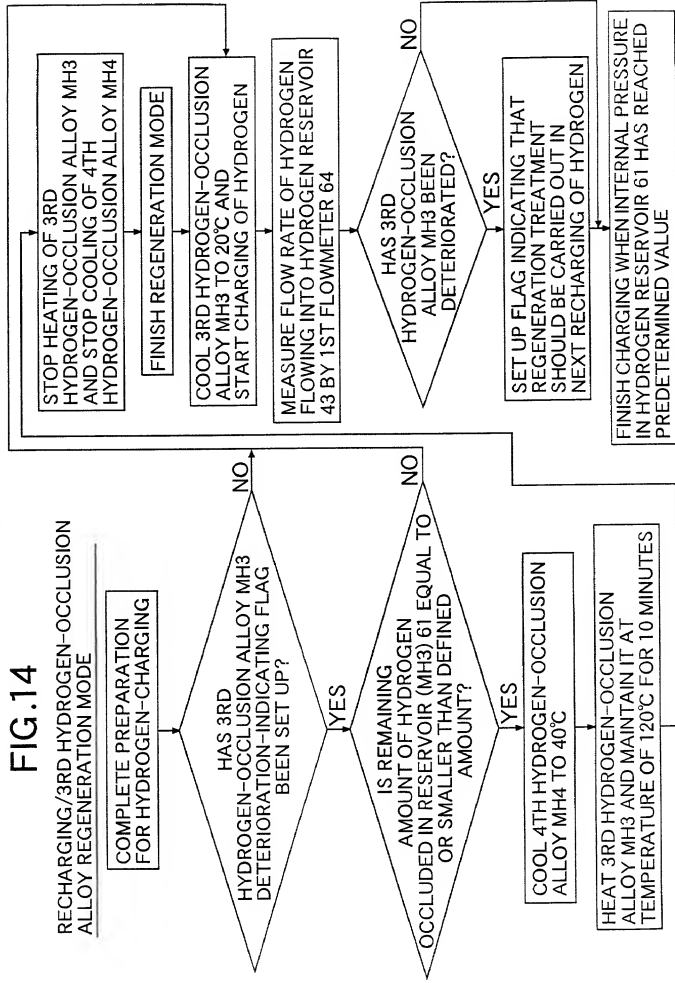


FIG.15

